Panel I.B - Capacity of Current Infrastructure for Supplies of Natural Gas

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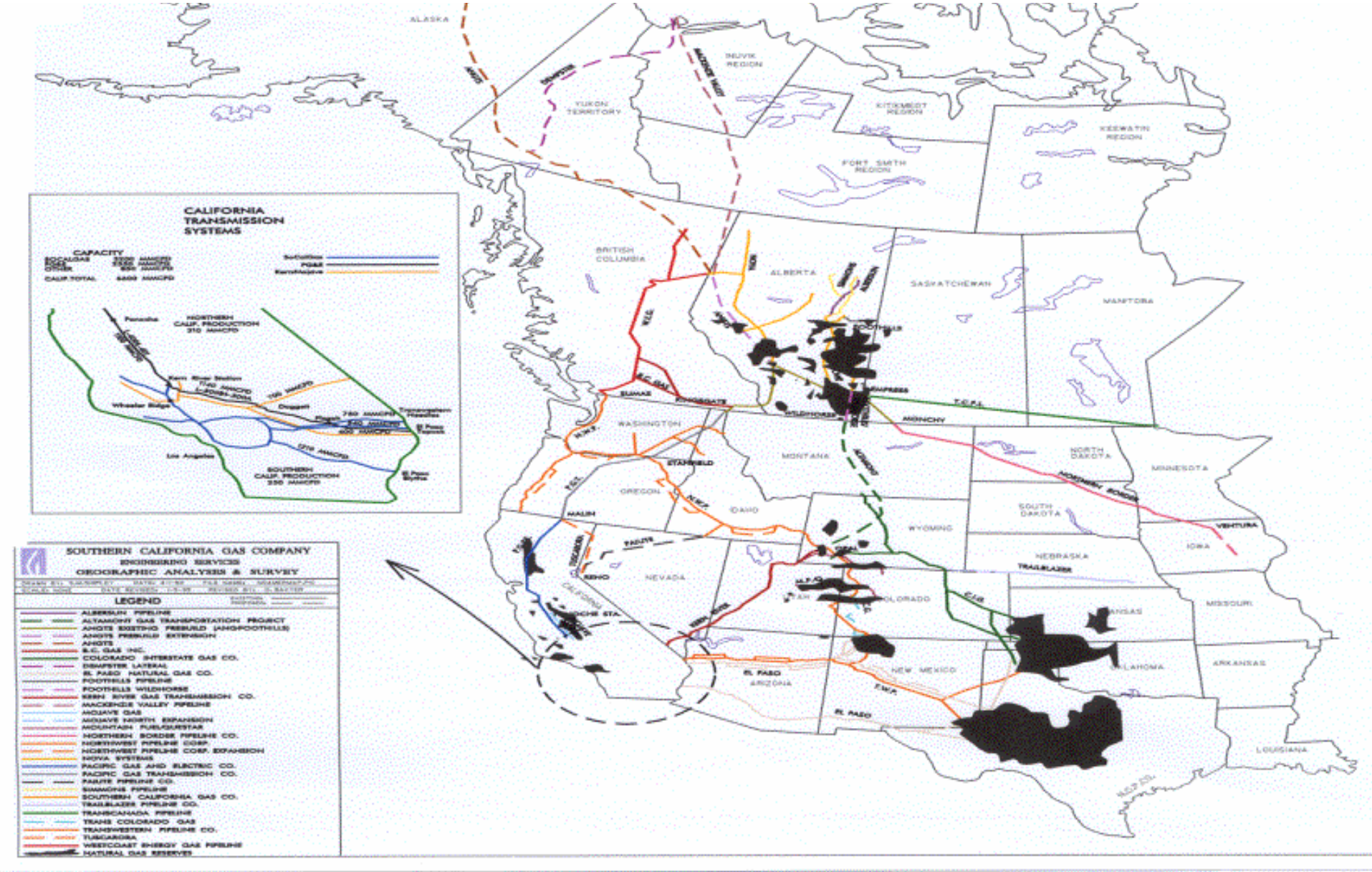
Overview

- Infrastructure in Southern California
- Current operating capacity levels
- Infrastructure impacts of adding new supply sources

California has access to all major supply basins in Western North America

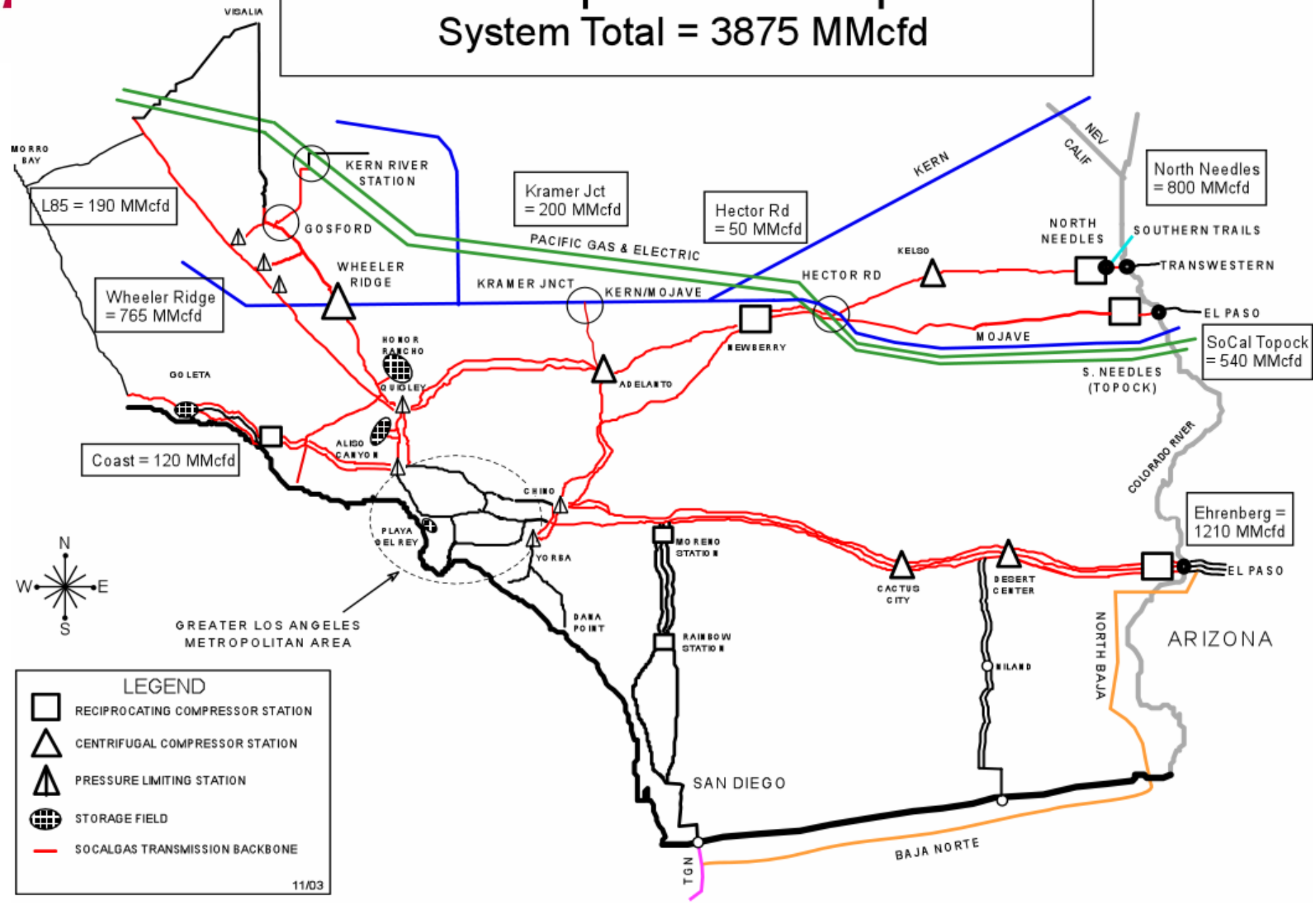


Infrastructure to California exceeds 8 Bcfd

Basin	Pipeline	Capacity
Permian/ San Juan	El Paso	3290 mmcfd
Premian/ San Juan	Transwestern	1210 mmcfd
San Juan	Questar	80 mmcfd
Rocky Mtns	Kern River	1710 mmcfd
Western Canada GT – NW		2190 mmcfd
	Total	8480 mmcfd
California Production (Cal Gas Report)		660 mmcfd

Firm Receipt Point Capacities

System Total = 3875 MMcfd



NOT TO SCALE

Infrastructure in Southern California

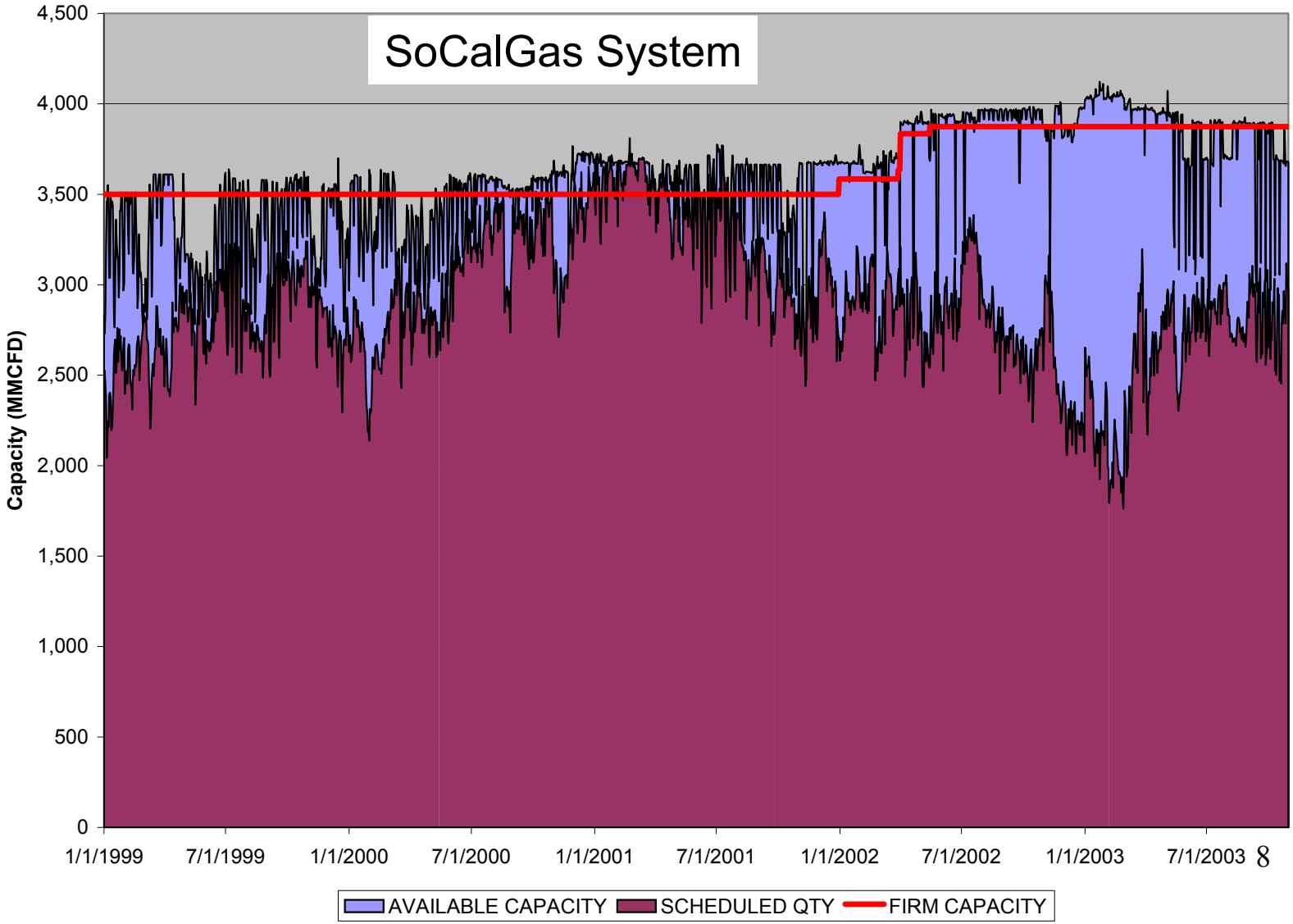
- Built to move gas supplies from out of state sources and California producing areas to demand centers or to storage
- Firm Receipt Point Capacity - 3875 mmcfd
  - 375 mmcfd added in 2002
- Storage Capacity

Inventory	122 Bcf
Injection	850 mmcfd
Withdrawal	3125 mmcfd

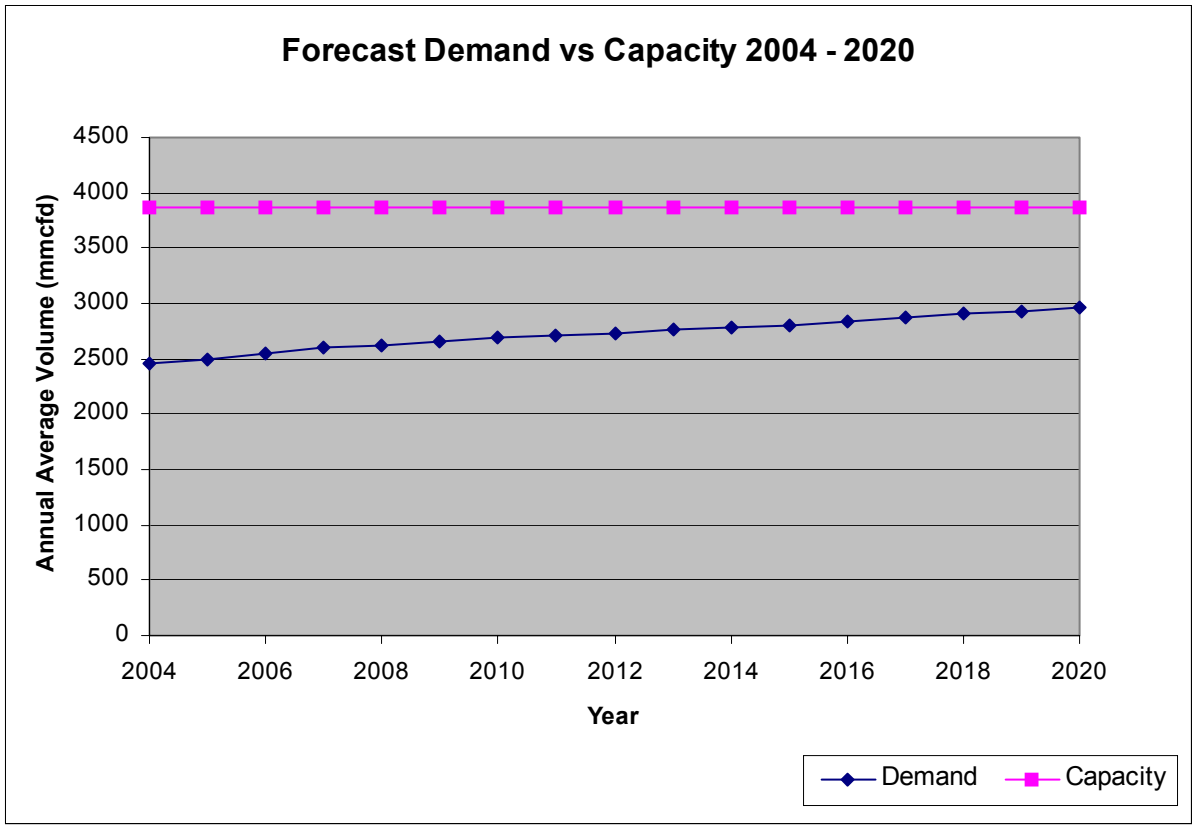
Pipeline Infrastructure in Southern California

- Historical design criteria - meet downstream demand
  - 1 in 10 year peak day for Core + Firm Noncore
  - 1 in 35 year peak day for Core
- 15 to 20% “slack capacity” at backbone receipt points to meet reasonably expected increases over average year demand
- Storage is integral to operations –
  - used to balance system hourly, daily, seasonally
- Demand range - 1.9 Bcfd to over 5 Bcfd
  - Both storage and flowing supplies required to meet the peak day demand

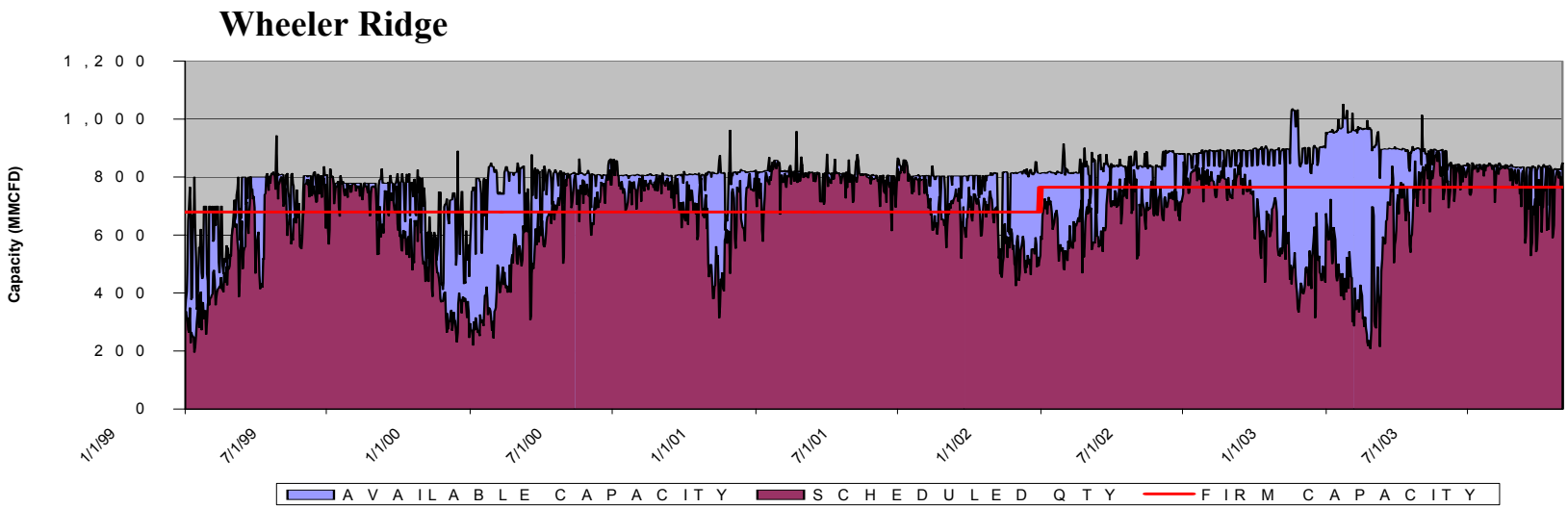
Utilization – significant level of slack capacity today (over 30%)

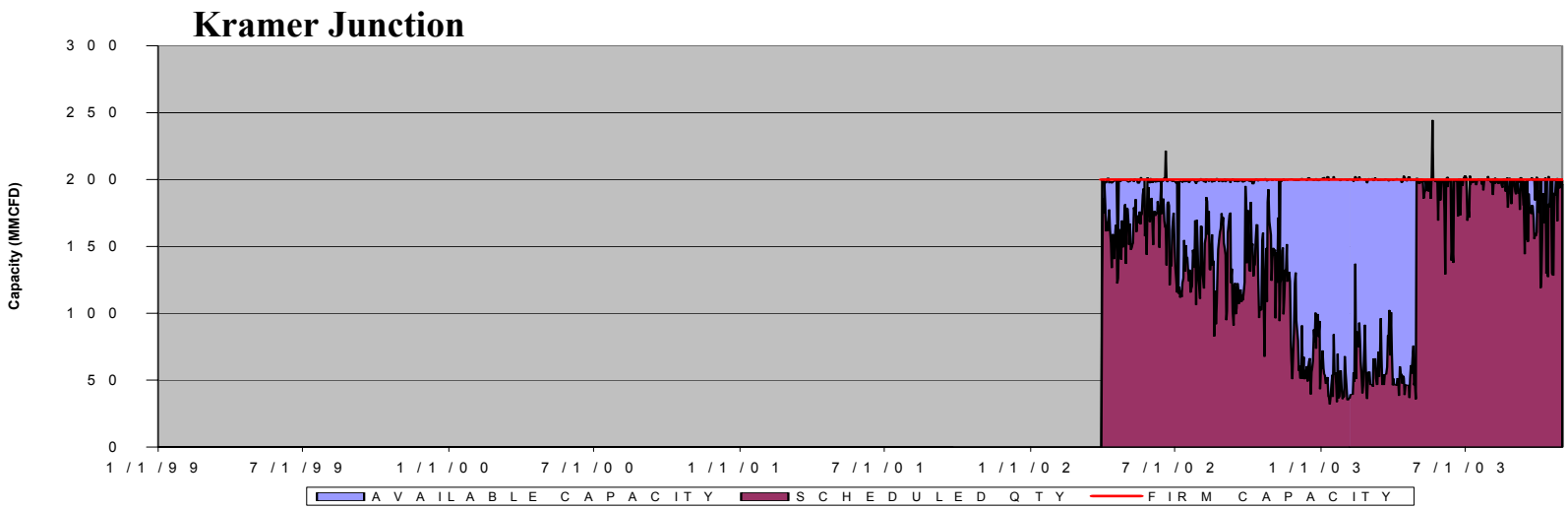


Slack Capacity projected to increase to 36% in 2004 and gradually decrease to 27% by 2015

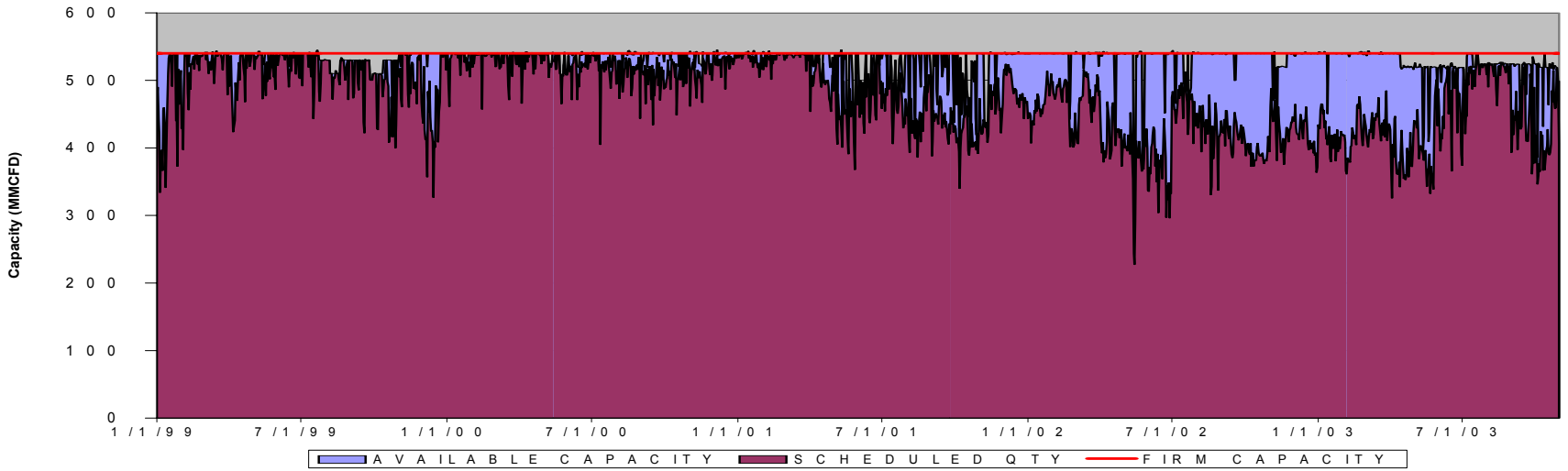


Some Receipt Points are used more heavily than others:

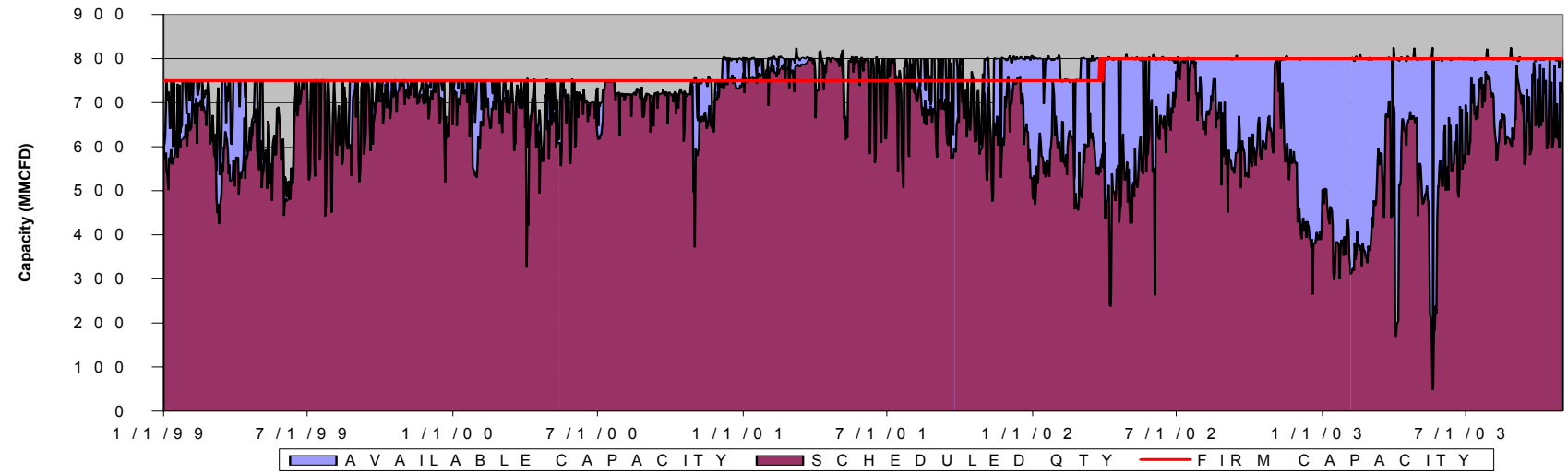




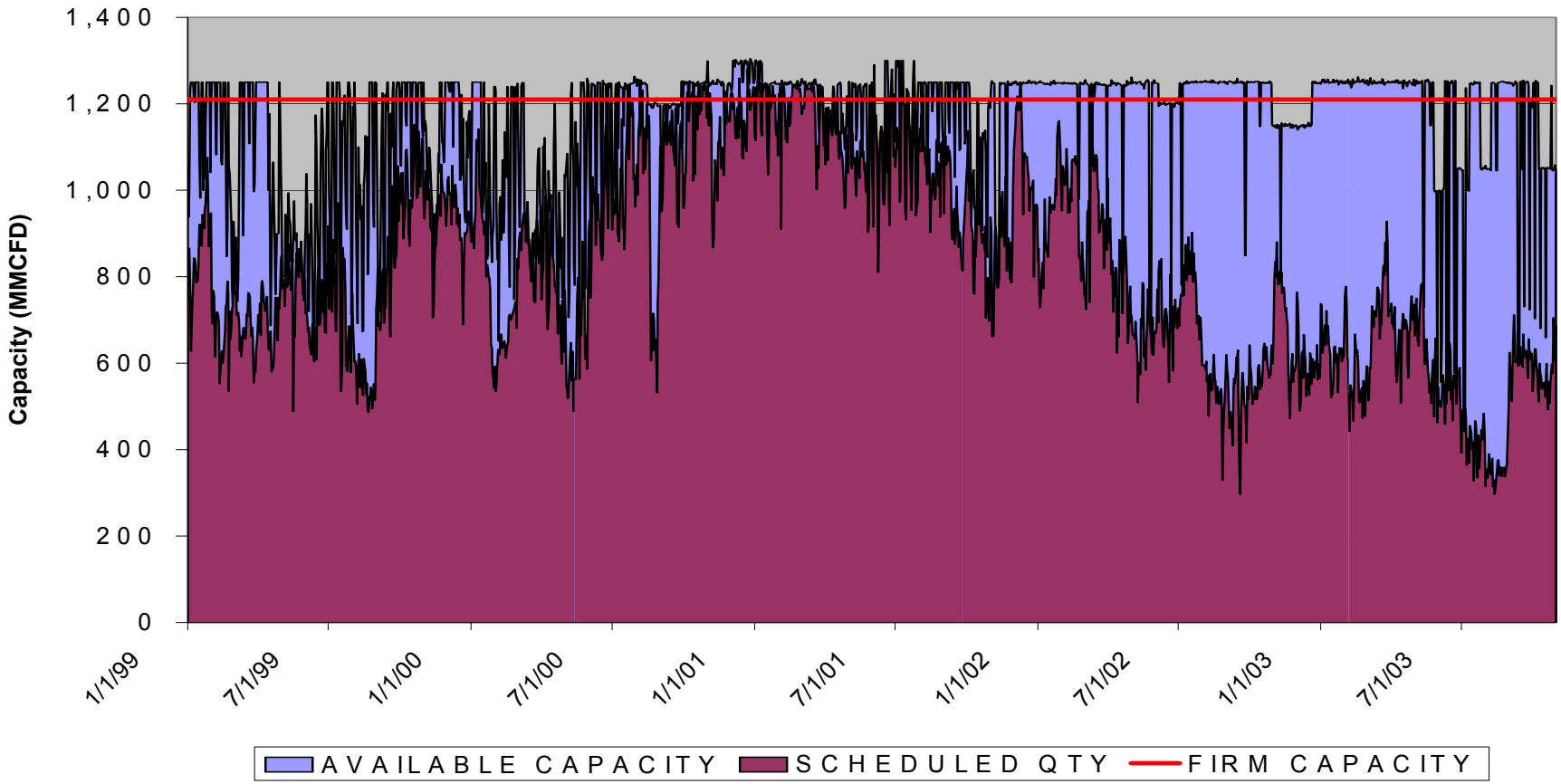
SoCalGas Topock



Needles



SoCalGas Ehrenberg



Infrastructure Impact of New Supply Sources

- Must be able to move New Supplies to demand centers in real time and keep system in balance
  - What comes in = must go out
  - New flowing supplies will displace existing flowing supplies daily
  - Facility improvements are required to allow the new supply sources to move demand centers and balance the system
- Cost Factors for facility improvements:
  - Location
  - Volume
  - Whether new supply capacity is allowed to displace existing sources, such that the 3875 mmcfd receipt point capacity remains the same, or the new supply source adds to the 3875 mmcfd receipt point capacity

Summary

- Infrastructure in Southern California is very robust
- Currently operating at lower capacity levels but customers value some receipt points more than others
- Infrastructure cost of adding new supply sources depends on location, volume, and whether or not new capacity is additional to the current 3875 mmcfd receipt point capacity